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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/678,020  | 10/04/2000  | Kiichiro Takahashi   | 1272.C0439          | 6101             |
| 5514  | 7590        | 08/09/2006           | EXAMINER            |                  |
| FITZPATRICK CELLA HARPER & SCINTO<br>30 ROCKEFELLER PLAZA<br>NEW YORK, NY 10112 |             |                      | BRINICH, STEPHEN M  |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2625                |                  |

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



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20051110

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**Commissioner for Patents**

## Office Action Summary

**Application No.**

09/678,020

**Applicant(s)**

TAKAHASHI ET AL.

**Examiner**

Stephen M. Brinich

**Art Unit**

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 2-4, 6, 13-15 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5, 7-12, 16 and 18-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. 20060804
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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**DETAILED ACTION**

1. The Office Action mailed 1/20/06 was returned as undelivered. A new copy of that action is attached below.

***Claim Rejections - 35 USC § 102***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 5, 7-12, 16, & 18-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Helterline et al.

Re claims 1 & 12, Helterline et al discloses (Abstract; column 4, line 45 - column 5, line 32) an image processing and printing system in which a plurality of density correction data (contents of look-up table 52) are derived from a judgment of printing conditions (actual print density compared to ideal density of a printout). These data are then retained and used to perform density correction corresponding the result of this judgment, thereby calibrating the printer. Printing is thus performed in accordance with these printing conditions.

Re claims 5 & 16, the printing calibration regulates the volume of a generated ink drop (column 4, lines 55-63), which inherently determines the dot size generated by an ink jet printer. This determination is performed in accordance with printing conditions (as described above re claims 1 & 12) that

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are determined in accordance with image data (the line width actually produced and the ideal line width desired).

Re claims 7-8 & 18-19, Helterline et al discloses a plurality of print elements (column 5, lines 33-47), each of which uses the retained calibration data.

Re claims 9-10 & 20-21, Helterline et al discloses (column 1, lines 43-48) an ink jet printing process in which ink is ejected from nozzles using thermal energy.

Re claims 11 & 22, Helterline et al discloses (column 5, lines 15-32) a printing condition judgment by means of a simulation printout (a "calibration run").

***Response to Arguments***

4. Applicant's arguments filed 7/14/05 have been fully considered but they are not persuasive.

Applicant argues (Response filed 7/14/05: page 2, lines 8-21) that the presently claimed "density correction data" and the presently claimed "printing condition" do not read upon the elements of the Helterline look-up table 52. In particular, Applicant argues (Response filed 7/14/05: page 2, lines 14-20) that the input  $\Delta DV$  of Helterline is not a "printing condition" as set forth in the present invention and does not correspond to the stored "density correction data" of the present invention.

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Concerning the latter point, the outstanding rejection of record does not read the "density correction data" on the input  $\Delta$  DV of Helterline, but rather reads the "density correction data" on the output from table 52 (which, by the inherent functioning of a look-up table, is stored therein).

Concerning the former point, the output from table 52 of Helterline is generated in response to the input  $\Delta$  DV (Helterline column 4, line 60 - column 5, line 5) and has a direct effect upon the printed output of (Helterline column 5, lines 5-14). Thus, the quantity  $\Delta$  DV is a condition according to which the printing means performs printing (i.e. a change in the quantity  $\Delta$  DV will produce a corresponding change in the printing as a direct result), and is thus readable on the recited "printing condition".

### ***Conclusion***

5. Any inquiry concerning the contents of this communication or earlier communications from the examiner should be directed to Stephen M. Brinich at 571-272-7430.

Any inquiry relating to the status of this application or proceeding or any inquiry of a general nature concerning application processing should be directed to the Tech Center 2600 Customer Service center at 571-272-2600 or to the USPTO Contact Center at 800-786-9199 or 703-308-4357.

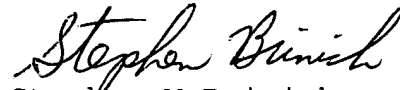
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The examiner can normally be reached on weekdays 7:00-4:30, alternate Fridays off.

If attempts to contact the examiner and the Customer Service Center are unsuccessful, supervisor David Moore can be contacted at 571-272-7437.

Faxes pertaining to this application should be directed to the Tech Center 2600 official fax number, which is 571-273-8300 (as of July 15, 2005).

Hand-carried correspondence may be delivered to the Customer Service Window, located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314.



Stephen M Brinich  
Examiner  
Art Unit 2624

smb  
August 4, 2006